



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,096	03/12/2004	Richard M. Hogan	4022-000014	8094
27572	7590	12/31/2009		
HARNESS, DICKEY & PIERCE, P.L.C.				
P.O. BOX 828				
BLOOMFIELD HILLS, MI 48303				
EXAMINER				
DESAL, ANISH P				
ART UNIT		PAPER NUMBER		
1794				
MAIL DATE		DELIVERY MODE		
12/31/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/800,096

Applicant(s)

HOGAN ET AL.

Examiner

ANISH DESAI

Art Unit

1794

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-24-30 and 48-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-24-30 and 48-54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB06)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Applicant's arguments in response to the Office action dated 07/20/09 have been fully considered.
2. In view of applicant's amendment to claim 29, the 35 USC Section 112-second paragraph rejections are withdrawn.
3. In view of applicant's amendment, a new 35 USC Section 112-first paragraph rejection is made.
4. The art rejections are maintained.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. **Claims 22, 24-30, and 48-54 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.**

Art Unit: 1794

6. Claim 22 recites "a **unitary** expendable polymeric layer". It is respectfully submitted that there is no support in the specification to recite that the expendable polymeric layer is "unitary".
7. It is noted that applicant points to paragraph 0032 for support. While there is a support to recite that a co-extruded sheet is unitary (see 0032), this does not provide a support to recite that individual layer (i.e. expendable polymeric layer) is "unitary".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 22, 24, 26, 28-30, 48, and 50-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahira et al. (US 6,395,360B1) in view of Gerard et al. (US 5,929,167).**
9. The Examiner respectfully submits that claim 22 as presently recited is interpreted as there is nothing in this claim that excludes layer A and layer B from comprising plurality of layers.

10. Regarding claims 22, 24, 48, and 53 Takahira discloses a pressure-sensitive adhesive sheet having a multilayer release liner (4, 4) applied on both sides of a layer of pressure sensitive adhesive 5 (equated to applicant's layer B-adhesive layer) (see abstract, Figure 2, and column 6 lines 26-45). The release liner 4 (equated to applicant's unitary expendable polymeric layer A) of Takahira as set forth at column 3 lines 30-35 comprises polyethylene and it exhibits good release function (abstract). Since the release liner of Takahira exhibits good release function (abstract), it is clear that the release liner is capable of being readily separated from the adhesive layer as presently claimed. The Examiner further submits that applicant's specification does not define what is meant by "unitary". This term is defined by the **Merriam-Webster Online Dictionary** as following:

Main Entry: uni-tary

1 a : of or relating to a unit **b** : based on or characterized by unity or units

11. It is submitted that based on the aforementioned definition of the term "unitary", the multilayer release liner of Takahira is interpreted to be unitary or "of or relating to a unit" (e.g. a unit of multilayer release liner).

12. With regards to the claim limitation of "co-extruded A-B-A composite sheet", the phrase "co-extruded" is interpreted to be a product-by-process limitation. The product by process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps. "Even though product by process claims are limited by and defined by the process, determination of patentability is based on the product itself.

The patentability of a product does not depend on its method of production. If the product in the product by process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985).

13. Once the Examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289, 292 (Fed. Cir.1983).

14. In the instantly claimed subject matter, a three-layer A-B-A composite sheet of applicant comprises an expendable polymeric layer A made of a polyolefin material and a thermoplastic adhesive layer B. Further, the claim language does not explicitly exclude other layers from being present in the three-layer A-B-A composite sheet. Moreover, the presently claimed invention requires that layer A is made of polyolefin material. The adhesive sheet (composite sheet) of Takahira is previously disclosed and it includes an adhesive layer 5 (layer B) that is covered on both sides with a release liner 4 (layer A) that includes polyolefin material. Based on this, there is no unobvious difference between the claimed composite sheet and that of Takahira.

Art Unit: 1794

15. The difference between the claimed invention and the prior art of Takahira is that Takahira is silent as to teaching a thermoplastic adhesive layer (claim 22) and the adhesive layer comprising a thermoplastic polyurethane (claim 26).

16. However, Gerard discloses a pressure sensitive adhesive composition and articles containing the pressure sensitive adhesive composition; wherein the PSA composition of Gerard comprises thermoplastic polyurethane (abstract). According to Gerard, the PSA based on thermoplastic polyurethane has a better tack and cohesion properties and exhibits enhanced stability (column 1 lines 34-45).

17. It is noted that the primary reference of Takahira discloses that no particular limitation is imposed on the pressure sensitive adhesive (column 5 lines 13-17). Gerald's PSA based on thermoplastic polyurethane has a better tack and cohesion properties and exhibits enhanced stability (column 1 lines 34-45).

18. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the thermoplastic polyurethane of Gerard in the invention of Takahira, since Takahira's invention imposes no particular limitation on the pressure sensitive adhesive (column 5 lines 13-17) and one would have used such a thermoplastic polyurethane adhesive with a reasonable expectation of success because such adhesive provides better tack, cohesion properties, and enhanced stability.

Art Unit: 1794

19. Regarding claims 28, 50, and 52, Takihiro discloses "Total thickness of the release liner can be selected as needed within an extent not damaging the strength, handling properties or the like, but generally it is about 20 μm to 200 μm " (column 4 lines 35-40), which converts to 0.00078 in to 0.0078 in respectively (using 1 μm = 0.000039 in) and reads on expendable polymeric layer having a thickness of 0.003-0.010 inches as presently claimed.

20. With respect to claims 29, 51, and 52, the thickness of the PSA sheet of Takahira is from 1 to 200 micrometers (column 6 lines 5-8), which reads on applicant's thickness of 0.005 inches (127 micrometers) to 0.09 inches (2,286 micrometers). This disclosure of Takahira in combination with the secondary reference Gerald, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the thermoplastic polyurethane of Gerard in the invention of Takahira with the thickness as taught by Takahira, since Takahira's invention imposes no particular limitation on the pressure sensitive adhesive (column 5 lines 13-17) and one would have used such a thermoplastic polyurethane adhesive with a reasonable expectation of success because such adhesive provides better tack, cohesion properties, and enhanced stability.

21. Regarding claim 30, it is reasonable to presume that this imitation is present in the invention of Takahira as modified by Gerard. The support for said presumption is based on the fact that the three layer A-B-A composite sheets of applicant and that of Takahira as modified by Gerard as set forth above include expendable polymeric layer

Art Unit: 1794

made of polyolefin and thermoplastic adhesive layer B. Further, the expendable polymeric layers A of applicant and that of Takahira as modified by Gerard are capable of being readily separated from the adhesive layer. Therefore, the aforementioned claim limitation would necessarily be present in the invention of Takahira as modified by Gerard. The burden is respectfully shifted to Applicant to prove it otherwise (see *In re Fitzgerald*, 205 USPQ 594).

22. **Claims 25, 49, and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahira et al. (US 6,395,360B1) in view of Gerard et al. (US 5,929,167) as applied to claims 22, 26, and 52 above, and further in view of Caldwell (US 3,581,884).**

23. Takahira as modified by Gerard is silent as to teaching A comprises a polypropylene and A is made of polypropylene as presently claimed.

24. However, Caldwell discloses a plastic film PSA tape, wherein the adhesive layer 8 of Caldwell is covered with a dry-strippable release liner (abstract). At column 4 lines 43-50, Caldwell discloses "A suitable dry-strippable release liner is a thick pigmented white polyethylene film...Another suitable liner is a matte finish nonpigmented **polypropylene** film...frosty surface.". This disclosure of Caldwell is interpreted as Caldwell discloses the equivalence and interchangeability of using polyethylene as disclosed by Takihara with using polypropylene as presently claimed.

Art Unit: 1794

25. Therefore, it would have been obvious to select polypropylene film as a release functioning layer (expendable layer A) as taught by Caldwell, because selection of a known material based on its suitability for its intended use establishes a *prima facie* case of obviousness.

26. **Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takahira et al. (US 6,395,360B1) in view of Gerard et al. (US 5,929,167) as applied to claim 22 above, and further in view of Schacht et al. (US 5,096,777).**

27. Takahira as modified by Gerard is silent as to teaching the adhesive layer comprises a plurality of individual adhesive sheets.

28. However, Schacht discloses a double-sided adhesive tape without a backing (see title). The disclosure of Schacht beginning at column 2 lines 19 to column 2 lines 45 is interpreted as Schacht disclose plurality of individual adhesive sheets that are covered on both sides with a release paper.

29. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use plurality of individual adhesive sheets, motivated by the desire to enhance the strength of the adhesive tape.

Response to Arguments

30. Applicant's arguments filed on 09/02/09 have been fully considered but they are not persuasive.

31. On pages 4 of the amendment, applicant argues that "The Takahira reference does not disclose a coextruded A-B-A composite sheet having layers A-B-A wherein A is a unitary expendable polymeric layer, as recited in amended claims. Instead, as set forth in section 8 of the Office Action, the release liner 4 of the reference is multilayer and is not unitary."

32. The Examiner respectfully disagrees. It is submitted that applicant's specification does not define what is meant by "unitary". However, this term is defined by the **Merriam-Webster Online Dictionary** as following:

Main Entry: uni-tary

1 a : of or relating to a unit **b** : based on or characterized by unity or units

33. It is submitted that based on the aforementioned definition of the term "unitary", the multilayer release liner of Takahira is interpreted to be unitary or "of or relating to a unit" (e.g. a unit of multilayer release liner). Thus, the release liner 4 of Takahira is unitary as presently claimed.

34. It is submitted that with respect to the references of Gerard, Caldwell, and Schacht, applicant has generally asserted his/her disagreement with the Examiner's rejection, but not provided any specific arguments relating to these references. As such, the Examiner incorporates his comments as set forth above here by reference.

Conclusion

35. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

36. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 1794

37. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANISH DESAI whose telephone number is (571)272-6467. The examiner can normally be reached on Monday-Friday, 9:00AM-5:30PM.

38. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on 571-272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

39. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. D./

Examiner, Art Unit 1794

/Callie E. Shosho/

Supervisory Patent Examiner, Art Unit 1794